

Dr. L.H. Gray,  
Mouht Vernon Hospital,  
Northwood,  
Middlesex.

14th March, 1957.

Dear Dr. Gray,

Thank you very much for your letter of 25th February, and for taking so much trouble to answer all my questions.

I regret to say that my estimate of 100 r was due to a misunderstanding of the definition of r - a unit which we do not normally use. A re-calculation shows that a 20 hour exposure of the crystal gives approximately  $5 \times 10^5$  r, and that this corresponds to 10 to 20 ionisations per virus particle. The effect of such an exposure is appreciable.

At the moment our apparatus is under repair. When it is working again we shall try adding cysteine, as you suggest. We cannot use dry virus, as the regularity of the crystal is greatly decreased on drying.

I shall write to you again if the combined effect of cysteine, nitrogen atmosphere, and reduced temperature give results that are of any interest.

Yours sincerely,

Rosalind Franklin.